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### JEF Home Page

### 1. Welcome to JEF

Code JEF is the Facilities Engineering Branch. This Branch provides engineering analysis, design, and other services to the Ames community. The Branch is made up of Civil, Construction, Mechanical, Electrical and Structural engineers, as well as Pressure Systems and Configuration Management folks. These Pages describe the people in JEF, what we do, and how we can best serve your needs. Also included is how to get in touch with us.

Include a directory listing of each member of JEF, and go to their individual page to get information on that person. Information should only be what projects that person is involved in.

Include on each person's page the capability to send that person email.

### 2. What's Going On

There are always many activities going on in JEF. We work on and manage the Construction of Facilities (C of F) projects at NASA-Ames. We are constantly designing or analyzing a new facility or project, or a modification to an existing facility. Every day we answer numerous questions about engineering policy, codes and standards, we attend design reviews, we count dollars and we make sure that everything at the Center is designed and built according to good engineering judgment. In addition, we study literature and attend conferences to make sure that we keep current on new legislation and standards.

Many of these areas are described below. Please click on any highlighted area for helpful information and guidance.

Environmental
Current and Future Projects
Pressure Systems
Configuration Management/Geographic Information System
Major Construction of Facilities (C of F) Projects

#### 2a. Environmental

Trish Morrisey is the environmental program manager for JEF. She reviews proposed and ongoing designs and changes to the Center to determine their impact to the environment. As part of her reviews, she makes sure that all Ames activities managed or implemented with JEF involvement meet state and federal environmental laws.

### 2b. Current and Future Projects

There are numerous projects being handled by Code JEF. These include:

Modernization of the Unitary Plan Wind Tunnel Rehab and Modification of the 52 Foot Centrifuge Rehab of the Bldg. 19 Electrical System Rehab of the Bldg. 239 Fire Sprinkler System Repair of Pressure Systems Repair of Hangar 3 Groundwater Remediation

These are just a few of the projects going on. Each project has a project manager and a construction manager. Depending on the size, dollar amount and risk involved with each project, it may go through a series of formal design review and analyses.

Return to the Photos Page to get a listing of each person in JEF. This listing will have that person's projects attached. Or, simply call Selena McArdle at 41517 or Debbie Pham at 46026 to find out who from JEF is involved in any projects that you're interested in.

## 2c. Pressure Systems

Repairs to existing pressure systems and designs, analyses and installation of new systems are going on constantly at Ames. Existing systems are always being inspected to determine their ability to continue their performance at necessary pressures and flow rates. When systems are found to be unable to safely perform, they are repaired or replaced. Owen Greulich (44117) is the Pressure Systems Safety Engineer for Ames Research Center.

### 2d. Configuration Management/Geographic Information System

Configuration Management is provided to the Center through Code JEF. Configuration Management consists of the control of changes to drawings, documents and actual systems. This service is provided to the large Construction of Facilities (C of F) projects at Ames, and to many smaller ones. Also, the Engineering Documentation Center (EDC) in the basement of Bldg. 213 is part of the Configuration Management group. The EDC provides change control and drawing modifications for well over 100,000 drawings at Ames. The Computer Aided Engineering (CAE) room, also in the basement, provides modifications and change control to electronic CAD files.

The Geographic Information System (GIS) is located in the basement of Bldg. 213. This function provides base maps and associated data, such as personnel data, underground utilities, environmental information, and many other sources of data for Ames. This information can be displayed graphically on a map or maps for your use. Maps can be generated to include pertinent data, at your request. GIS can access any data on a Sybase database.

Please call Valerie Mahaffey at 43933 for Configuration Management, EDC, CAE or GIS support.

2e. Major Construction of Facilities (C of F) Projects

There are currently four major C of F projects at Ames Research Center. These are:

- 1. Modernization of the Unitary Plan Wind Tunnel Complex
- 2. Aeroacoustic Modifications to the 40x80 Foot Wind Tunnel
- 3. Restoration of the 12 Foot Pressure Wind Tunnel
- 4. Strategic Observatory for Infrared Astronomy (SOFIA)

Please click on the project that you're interested in for a link to the next page and more information.

2e1, 2e2, 2e3, 2e4.

# 3. More Helpful Information

Code JEF can help you with your project, or to determine your need for analysis and project management. Just click on any area below to move to more information on that area.

Construction, Including Permitting Electrical Analysis and Design Mechanical Analysis and Design Civil/Structural Analysis and Design Reviews Required JEF Approvals

## 3a. Construction, including permitting.

Every project and/or modification of any kind requires a construction permit. Because design review is linked with permit processing, these permits help Ames ensure that all laws, codes and standards are met. Also, the permitting process helps ensure that drawings are kept current. Each year, a huge amount of time and money is spent verifying drawings that haven't been kept up to date, and in recovering from mishaps caused by reading and following outdated documents. Peter Goldsmith at 44113 can help you through the permitting process.

# 3b. Electrical Analysis and Design

Terry Lusby (46392) can help answer your questions on your planned electrical projects, whether for new or existing equipment or hardware.

## 3c. Mechanical Analysis and Design

Ken Hamm at 44111 can help you with your mechanical design and analysis questions.

# 3d. Civil/Structural Analysis and Design

Ray Schuler at 46659 can help you with any civil or structural related issues, such as putting in a new door, or with any questions that you have about structural integrity.

#### 3e. Reviews

Depending on the dollar amount, the size and the risk involved, many projects require a certain amount of analysis and formal design reviews. Marla Harrison, Code JEF Branch Chief, or Don Nickison, Assistant Branch Chief, can answer your questions and help you to determine the required level of review for your project. Marla can be reached at 46371, and Don at 41748.

### 3f. Required JEF Approvals

Depending on the complexity and other factors of your design, it may require a certain level of JEF review. These reviews will ensure that your design, and future construction or fabrication of your design, meets all proper codes, standards and laws. Please call Code JEF Branch Chief Marla Harrison at 46371 or Assistant Branch Chief Don Nickison at 41748 to determine the need for JEF reviews.

Also would like to include comments page at the bottoms of each page, and a counter.

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